UNITED NATIONS
ECONOMIC
AND
SOCIAL COUNCIL

GENERAL

UNESCO/SS/CONF.URB/3
E/CN.11/URB/3
22 June 1956

ORIGINAL : ENGLISH

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION

JOINT UN/UNESCO SEMINAR ON URBANIZATION IN THE ECAFE REGION

Jointly sponsored by the United Nations Educational, Scientific and Cultural Organization, the United Nations Bureau of Social Affairs and the Secretariat of the United Nations Economic Commission for Asia and the Far East, in co-operation with the International Labour Office

8-18 August 1956
Bangkok, Thailand

ECONOMIC DEVELOPMENT POLICIES IN RELATION TO TYPES, SCALE AND LOCATION OF INDUSTRIES AS A FACTOR LIKELY TO INFLUENCE URBANIZATION TRENDS IN ECAFE COUNTRIES

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I. Type, scale and location of industries in ECAFE countries

1. The influence of governments over location of industries, their types or their scale of operation had in ECAFE countries, by and large, been only indirect, till almost the beginning of the post-war years, except probably in Japan, where in the latter half of the 19th century the government for a brief period started model industries to show the way.[1/] Developmental expenditure in regard to transport, communications, electric power or other public utilities essential for industrial development, as also fiscal, monetary, trade and other measures, had influenced the pattern of industrial development. But the exact location or the type of industry to be established, or the scale of output, had been decided primarily by individual persons or firms. Governments had generally been content not to interfere with the free play of market forces in the development of national economy. Competition had generally been considered to be beneficial, helping to produce a more efficient allocation of resources and a more healthy production alignment.

2. The resulting industrial development had, however, been somewhat unbalanced in the context of the prevalent resources situation in some countries. Industries in some cases had been modeled on the western pattern using labour-saving machinery and making difficult a fuller utilization of the abundantly available manpower. Advanced techniques and equipment had reduced costs but the loss of employment in traditional industries in villages and towns without alternative opportunities had been considerable. The growth of factory industries in cities had generally not evoked the right responses in traditional industries - responses leading to rationalization, use of better techniques,

/improved

1/ Since the early post-war years governments in Asia, especially of many newly independent countries, have pursued a deliberate policy of industrialization which in many cases is being implemented by means of direct government participation, and have thereby brought their influence to bear more positively on trends of urbanization.

improved equipment, organization, standardization, training etc. - and so had resulted in the steady decline of the competitive power of traditional industries. Those engaged in small industries had preferred to accept diminishing incomes to total deprivation.[1/]

3. Competition had been severe and the factory products had set the standard for prices and patterns. In countries where industrialization has not progressed and is still relatively meagre, the traditional industries have been engaged in a straight competition with imported cheap factory products. The rigid setting of small industries has prevented necessary adjustments to the changes in demand. While the large industries in the urban areas have extended their scale of operations and have enlarged their markets, traditional industries in small towns and rural areas have held their markets only where craftsmanship has carried a premium or where costs of transport or other locational advantages have discouraged the entry of competing products. Much of the industry in villages or towns has continued to be staghant using antiquated techniques turning out unstandardized products. Producers are unorganized with hardly any common facilities for procurement of raw materials or production. Distribution is generally controlled by middlemen who also provide finance at exorbitant rates in many cases. The gap between the city and the villages has tended to widen the growing gulf in applied technology. New industries have gravitated to the already developed areas around a few big cities, producing a lack of balance in regional distribution.

4. If urban growth, described as the best general test of industrialization, is studied in the Asian countries it is only in Japan that the economic character based upon industrial specialization and exchange is observed to be relatively more prominent. The reason for this appears to be that some of of the basic foundations for industrial development have not been confined to large cities but have also been effectively built up on a limited

/scale in a

1/ The silk industry developed in mainland China in rural areas by agriculturists as a secondary source of income was affected by competition from local machine reeled and imported (Japanese) goods. Better organized traditional industries in towns in many cases also suffered. For example, out of 33 handloom weaving industrial centres in India, the earnings of handweavers decreased between 1928 and 1941 by 34-38 per cent in four centres, by 40-48 per cent in four centres, by 50-66 per cent in 12 centres, by 61-70 per cent in six centres and by 71-91 per cent in the remaining seven centres, while the reduction in numbers did not exceed one-third in the worst depression years. (Report of the Fact-Finding Committee (Handloom and Mills) 1942, pp. 199-200).

scale in a number of towns of moderate size. However, the cost of industrialization has been cheapened by avoiding excessive urbanization with its heavy overhead provision of urban housing, transport, water supply and other services, by developing industries which relatively require less capital and which do not heavily draw on public utility services, and by applying a labour-intensive technology which keeps the available manpower fully employed. In Japan, the urban areas (with a population of over ten thousand people) have developed industrial and commercial activity so successfully that they have absorbed almost the entire population increase since 1900. The drift of population from rural to urban areas of different sizes, however, has not been uniform; the bigger cities have grown more rapidly.

5. In Japan, while labour moved to the urban areas technology, organization, capital and entrepreneurship were carried to the rural sector of the economy. The traditional industries in the countryside reacted to the growing factory competition by developing economies through large-scale organization for marketing arrangements, cheap credit and electric power. Small industries with lower overhead costs possessed greater flexibility and were able to change their lines of production with greater resilience especially during the depression years. A natural demarcation of spheres of production has developed with the large units concentrating on a few major lines and specializing in the production of semi-processed standardized material which is worked into a variety of finished goods by small units. The attention given to non-price features such as sales promotion through better designs, the importance placed on attractive packaging, standardization of product and low prices have helped the small industries to develop their markets. Decentralized operations and issuing out jobs by factory industries to smaller units have also helped integrated and and complementary development among industries of various sizes and types. Economic activity i cities, towns and villages has been developed without major conflicts.

/6. Distribution

6. Distribution of industry has been uneven in the other major countries of the region, where industrialization has made some progress. Industry in Mainland China has grown especially in north-east and coastal provinces, the latter alone accounting for two-thirds of the value of industrial output in 1952. Roughly four-fifths of pig iron, steel and related products, generators and cotton spinning and weaving machinery were manufactured in the coastal provinces mainly by the few leading industrial cities of Shanghai, Canton, Wuhan, Tsingtao, Anshan and Tientsin. It is estimated that among these cities Shanghai alone supplied approximately one quarter of the nation's industrial output: over two-fifths of the spindles in mainland China were located in this city, cotton being transported not only from the proximate northern Kiangsu but also from distant areas such as Honan, Shantung and Hopei, where the textile industry could have been easily developed. The development of the Shihchiachuang coke factory in Hopei province where there was neither a coal nor an iron and steel industry necessitated transport of crude coal, washed coal and coke as between the Shihchiachuang coke factory and Peking three times.[1/] North-west China and South-west China and Inner Mongolia which form nearly 70 per cent of the country's area turn out only 8 per cent of the total value of industrial production.

7. The absence of a good road and railway network led to the initial establishment of large-scale industries in India in port towns with harbour facilities. The policy of railways as they spread their operations with their discriminating freight rates favoured port towns encouraging the congestion of industries in a few areas to the detriment of others. There has been dispersion of some of the older large-scale industries like cotton textiles which have developed in new industrial centres, as also some development of new towns like Jamshedpur, but this limited expansion has been more than offset by rapid development of new industries in the older industrial cities.

8. Generally, industry has settled down wherever it has been profitable even though conflicts with the interests of social welfare have developed. There has been no planned location of industries in specially earmarked areas. Development of industry in many cases has meant expansion of existing plants in

/nearby cites.

1/ "The question of geographic distribution of industrial enterprises under the first Five-Year Plan", Kuang Ming Jih Pao, September 23, 1955.

nearby sites. New industries have been drawn to the already developed centres where labour supplies are readily available. This explains the trend of rapid growth of the leading industrial cities compared to the relatively stationary or minor growth experienced by non-industrial urban areas.

9. Some of the cities in Asia have become so congested that they show the highest urban density in the world. This has been so even though living space has been much less than in advanced industrial cities elsewhere where at least apartment buildings with many floors relieve the pressure to some extent.[1] The incredibly poor housing conditions have led to the growth of a large street dwelling population in many cities. The housing schemes in the various cities in Burma, Ceylon, India, British Terroritories, and Pakistan have been essentially to meet the needs of middle classes. The powerty of the people has made it difficult to invest in houses as recovery of capital is well-nigh impossible.

10. Besides the causes contributing to the growth of urban areas such as natural increase, lack of economic opportunities in rural areas, village pressure, and advantages of urban life like better living and educational facilities, the large influx of refugees in many urban areas during the post-war years especially in China: Taiwan, Hong Kong, India, Indonesia, Pakistan and South Korea has aggravated the problem.[2] This abnormal growth has led to the growth of a number of small enterprises which may be described as marginal self-employment. Many make-shift shops, street peddling, small service and manufacturing industries etc. have grown. In China: Taiwan it is estimated that this type of employment covers roughly 20 per cent of the men between the ages of 15 and 50 years in the 17 urban areas in which a survey has been made.[3] In Djakarta, roughly 85 per cent of the annual population increase is accounted for by internal migration in 1951-53 of which labourers in industry and transport formed the biggest group. A sample survey places them at 44 per cent of the working population even though their former occupations were not in the same lines to such a large extent.[4]

/This feature

1/ For some data on urban housing conditions in India see Kingsley Davis, The population of India and Pakistan, (Princeton University Press, Princeton, New Jersey, 1951), p. 146.

2/ For details see United Nations, "Economic causes of implications of urbanization in the recent experience of countries in Asia and the Far East" (Paper contributed to UN/UNESCO Seminar on Urbanization held in Bangkok, August 1956.)

3/ Arthur F. Raper, Han-Sheng Chuan Shao-hsing Chen, Urban and industrial Taiwan-crowded and resourceful, published by Foreign Operations Administration Mutual Security Mission to China and National Taiwan University, p.5.

4/ University of Indonesia, Institute of Economic and Social Research, "The Urbanization of Djakarta", Economics and Finance in Indonesia, Vol. VIII, No. 11 (November 1955), p. 207.

This feature even in a non-industrial city such as Djakarta is only more pronounced in some other industrial urban areas elsewhere. Increase in population has not been absorbed by large-scale industries to a significant extent. In India, for example, employment in factories mainly in urban areas rose from 2.36 million in 1948 to only 2.53 million in 1953 or a 7 per cent increase while industrial production has recorded a rise from 108.4 to 135.2 (1946 = 100). The growing urban population has attempted to carve out fresh avenues of employment. The point has come where the advantages gained by aggregation of industry in big towns and cities due to the availability of power, transport, banking and other facilities is fast receding with the emergence of slums, incidence of ill-health, strain on public utilities and other increasing social costs. Added to this is the challenging problem of urban unemployment becoming increasingly difficult.

11. Growth on the urban fringe with a sprawl to the outlying areas is no solution as concentration of industry is not reduced greatly and the demand on public services is not diminished. While efforts must be made to improve the conditions in the cities by providing increased amenities, and public services to the growing number of small entrepreneurs (as for example by offering common facilities in large buildings with several rooms, in each of which a small industrial unit could be housed as in Rotterdam, or as is proposed in Hong Kong, or help in equipment, technology, financing and marketing), it is also necessary to call a halt to the growth of some of these cities beyond a limit. Industrial zoning, slum clearance or other town planning measures, while useful to regulate the growth of new industrial areas, cannot be very effective in solving the problems of many of the urban industrial areas which have already developed in a chaotic fashion.

12. Historically speaking, light consumer industries have tended to congregate in big cities, where consumer purchasing power is concentrated. Heavy industries, however, are generally located near raw material and power sources or sometimes at break of bulk points; this usually meant the creation of new specialized towns at the site of such sources, e.g., mining and steel towns, cement towns, automobile towns, etc. In course of time, these towns come to attract ancillary and complementary industries, thus increasing the size of the

original townships several fold. This pattern is also emerging in India and China where the implementation of national development programmes with emphasis on heavy industry has accelerated the growth of new industrial centres located in previously undeveloped regions containing mineral, power and raw material sources.

13. Thus, in India for example, the fertilizer factory in Sindri is located in the Damodar Valley area of the rich Bihar-Bengal mineral region. Sindri has also drawn to itself a cement as well as a coke oven plant based on the by-products from the fertilizer factory. Again, the location of an automobile assembling and manufacturing plant in Uttarpara in West Bengal has greatly expanded the old town. The little town of Mithapur has grown considerably after the location of a new soda ash plant. The three proposed steel plants in India - one at Rourkela in Orissa, a second at Bhillai in Madhya Pradesh and a third at Durgapur in West Bengal - are expected to add greatly to the growth of population in the proposed sites. Furthermore, the prospective swarming of ancillary and complementary industries will certainly lead to the creation of an entirely new set of towns around the steel sites. In the case of light industry also, there has been some shift from big coastal cities to the interior, where the availability of raw materials, power, fuel and transport facilities have influenced to a great extent the establishment of industries and new townships. Ahmedabad, Nagpur, Sholapur and Cawnpore are all interior centres in cotton belt regions, endowed with fuel and transport facilities besides the availability of cheap labour and a regional consumer market.

14. In mainland China, the recent accelerated pace of industrial and transport development has given rise to the construction or extension of a number of industrial towns, especially in the interior. The shift to raw material sources in the interior has been especially marked in the case of heavy industries. Even in the case of light industry a deliberate attempt is being made to shift them to sources of raw material and market centres in the interior of the country. In Malaya, the Lever Bros. Factory for the manufacture of oil, soap and oil extracts is located at the outskirts of Kuala Lumpur where raw materials are almost at the doorstep and wood for packing cases is available in the nearby forest. The Associated Portland Cement Factory in Rawang is situated 17 miles from Kuala Lumpur in an area rich in limestone and proximate to abundant sources

/of electric power,

of electric power, coal, fuel and shale. The Cebu Portland Cement Factory in Tinan, Cebu, Philippines, situated in an area with large deposits of required raw materials, has been responsible for a spectacular growth of population in the area. The Maria Chistina hydro-electric project, in Iligan, Philippines, has drawn to itself a number of subsidary industries, a fertilizer plant, a sulphuric acid unit and a steel mill. Population in the surrounding area has steadily increased. In Pakistan, the area within which the Jauharabad sugar mills are located has considerably increased in population. Health needs, coupled with other factors, necessitated the establishment of a DDT plant at Nowshera. The selected site at Nowshera is the place where the Pakistan Industrial Development Corporation built a caustic soda plant and a cardboard factory. The three factories are closely knit in matters of supply of chlorine needed in the production of DDT powder and steam for operation to be provided by the cardboard factory. The factories are within the vicinity of large deposits of soapstone needed for the manufacture of DDT powder, very close to railway lines and sources of power and water supply. The Gal Oya Development Project in Ceylon which is situated in a cleared jungle area has generated new industries like a sugar mill, bricks and tiles factory. The project area is expected to absorb excess population from congested areas in Ceylon.

15. When such industrial units are set up in small communities, over a period of years the size - as also the character - of the community is altered. A new set of technicians are either imported from outside or trained up locally; depending on the scale of industry, some immigration of labour may be found necessary; a new set of managerial and supervisory staff add to the plurality of society. In other words, a village becomes urbanized in the process.

II. Economic development policies as a factor affecting urbanization

16. An appraisal of the current economic development policies in the ECAFE region shows that even though there is sufficient recognition of the dangers of the growth of giant cities no serious direct steps as such have been taken to arrest this development except for some legislation of varying effectiveness dealing with town planning and new construction activities. In India, however, the hapharzard application of modern techniques in some spheres of production causing technological unemployment has been checked. The problem is being met by limiting the growth of existing or new large-scale industries, mostly located in urban areas, by setting up common production programmes, by levy of a cess on factory production, and by provision of organizational and marketing assistance to traditional industries. There has also been a freezing of existing techniques and consolidation of labour-intensive devices particularly in industries developed by private initiative such as oil-seed crushing, rice milling and food processing in rural areas. These measures, which are aimed at the modern techniques wherever they adversely affect employment, have limited the increase in unemployment or under-employment in existing occupations.

17. A study of the investment pattern in the public sector in the ECAFE countries shows how the priority tostrengthen the production base calls for large investments in basic overheads and in heavy industries[1/] leaving little for investment in a wide range of light industries, which have to be developed on a decentralized basis. In mainland China, the proportion of government investment for above-norm projects[2/] in industries is as high as 88.8 per cent, necessary for manufacture of capital equipment under the first Five-Year Plan (1953-57); the draft frame for the second Five-Year Plan of India also plans rapid development of heavy industry by proposing 78.6 per cent of public investment in industry for development in

/this line.

1/ See Economic Survey of Asia and the Far East,1955, p. 27 and also Economic Survey of Asia and the Far East,1954, p.51.

2/ In mainland China, the State has set an investment norm for every category of capital construction. Any project calling for an investment above the limit set is referred to as an above-norm project, and that calling for an investment less than the limit is referred to as a below-norm project. In industry, the investment limits set for capital construction projects vary by fields from Yuan 3 to 10 million.

in this line. Beginnings have been made in other countries in establishing heavy industry, notably in Indonesia and Pakistan. The consumer goods factory industries developed by governments have not been significant in terms of employment or as a percentage of national income and have been mainly in countries where there is no indigenous entrepreneur class willing to invest in industry as for example, in Burma, Ceylon and Thailand. Development planned by governments in the industrial sector generally will not generate sufficient employment opportunities, as much of it is investment in heavy industry that absorbs comparatively little manpower. The scope for increased employment in the modernized industrial sector, private or public, is not high.

18. The increased demand for consumer goods that is induced by investment in irrigation, power, transport, construction, industrial and other projects under the various development programmes has to be necessarily met by using relatively labour-intensive methods of production. The immediate sacrifice in the present level of consumption are likely to be made up with increased production that will gradually grow with the wider availability of more power, transport, better tools and equipment. The success of some of these plans will initiate industrial development in many new industrial centres and spread industry more evenly. Reliance on labour-intensive techniques will also to some extent achieve the objective of increasing employment opportunities over a wide area. It is possible that industry may be increasingly decentralized and grow where large supplies of manpower are available rather than moved to concentrated industrial areas for labour.

/19. The weight

19. The weight of employment considerations in the region is revealed by the current plans for industrial development. In Afghanistan, a recent project to establish a textile mill on modern lines containing the latest machinery and capable of producing roughly 45 per cent of the country's clothing requirements has been revised mainly to develop the spinning section, as otherwise, had this capacity been utilized to the full, the result would have been a substantial decline in the volume of employment in the handloom weaving industry. Creation of employment opportunities especially in rural areas and small towns by offer of loans to modernize industries with a view to reduce dependence on imports is attempted in Burma on an increasing scale. There has been a shift from the active promotion of factory industries to almost exclusive concentration on experimentation and discovery of decentralized small industries in Ceylon.

20. The building of small-scale and rural industries to meet the increased demand for consumer goods is pursued vigorously in mainland China. Government help by means of tax concessions and credit is offered by State banks by setting apart specific sums for loans to handicraft producers' co-operatives on favourable interest terms. Development by co-operatives is advocated by the Constitution as essential to small industries. Membership in small industries run on co-operatives lines, which was over 1.1 million by the end of 1953, is expected to reach 5 million by 1957. Production is undertaken on the basis of definite orders placed by consumers' co-operative societies. Integration of production and sales, emphasis on standardization and quality, and cutting out distribution costs have helped some accumulation of capital which is as far as possible reinvested back in the industry. Efforts are being made to improve techniques and equipment. Semi-mechanization and mechanization are continuously pursued so long as they do not reduce employment. The policy of serving local needs with the help of local raw materials will help industrial growth on a decentralized basis.

21. Development of large industry for its supporting and supplementary character to small industry; the setting up of central production plants serving as common facilities and stimulating small industries for essential

/needs,

needs, i.e., clothing, housing, simple tools etc. in Indonesia; the attempts in Pakistan to rehabilitate skilled artisans; and support to industries using local raw materials producing utility articles and providing employment in the Philippines etc. illustrate this trend and suggest gradual diversification of industry and decentralized growth.

22. Provision of widespread employment opportunities and decentralized industrial growth have been initiated in India, where the rate of development expenditure on small industries under the first Five-Year Plan records a substantial rise in recent years.[1/] The allocation under the second Five-Year Plan for village and small-scale industries is Rs 2,000 million or a little less than 4 per cent of the total outlay of Rs 48,000 million in the public sector as compared with Rs 314 million or roughly one per cent of the total outlay under the first Five-Year Plan. Of this, besides the greater support to handloom weaving, Khadi and village industries of Rs 1,149 million in 1956-61 as compared to Rs 238 million in 1951-56, a special provision of Rs 550 million has been made for the development of small-scale industries for the second plan period, which is more than a tenfold increase over the figure for the earlier five years. The Village and Small-Scale Industries Committee has recommended increased expenditure in some cases to take care of needs for working capital which amount to another Rs 100 million for small-scale industries. A whole time employment for 160,000 workers is expected to arise out of this investment in small-scale industries or a per capita investment of Rs 4,062, which is no less capital intensive than in some of the large-scale industries. It is important to note that development of such industries may run counter to the general policy unless it be that these highly capitalized units have a catalytic effect on the rest of the economy.

23. It should be noted that the term "small industries" covers a wide variety of industries ranging from traditional cottage and village handicrafts such as hand spinning and weaving, pottery, blacksmithy and oil pressing etc. to modernized, power-driven and specialized small-scale industries such as manufacture of textile accessories and parts of machine tools. Among these, distinction has generally been made between industries

/which form

1/ For details see Report of the Village and Small-Scale Industries (Second Five-Year Plan) Committee, Government of India.

which form an integral part of the traditional village economy and industries which have tended, for various reasons, to locate themselves in urban areas. The latter group of industries can itself be divided, for convenience, into three groups: one, traditional handicrafts producing highly artistic and luxury type of goods such as embroidery, gold and silver ware etc. the demand for which is generally in large urban centres or comes from abroad; two, the residentiary consumer industries such as bakeries, flour mills and refreshments; and three, those industries which are comparatively recent and intimately tied to large-scale industries, and which may hence be expected to increase automatically along with large-scale industries.

24. The locational pattern of the last group of industries generally follows that of the large-scale industries. Some of these small industries are ancillary to large-scale industries in the sense that they supply small component parts required by large-scale manufacturers, such as automobile, textile and electrical accessories and parts of machine tools. There is again another type of small-scale industry which is also ancillary in character to large-scale industries. These are the various engineering workshops, repair and servicing units located in the vicinity of large industries. Even those small-scale industries which are competitive with, rather than complementary to, large-scale industries may be tied to large-scale units in urban centres for the supply of essential semi-processed raw materials or may be joint users with them of common facilities available in such urban areas.

25. To make small-scale industry independent of such locational pulls to large cities, attempts arebeing made, as for instance in India, to constitute what are called industrial estates, where an integrated set of common facilities necessary for small-scale industries is being created. Many of these are proposed to be established in existing and small-size towns. In a few cases, the establishment of these industrial estates has involved the creation of entirely new townships (Nilokheri, Faridabad, Phulia and Gandhi Dham, etc.). Even these townships, however, have been generally situated not far from the big cities; in fact, they are generally found on the arterial highways leading to such cities.

/26. The move

26. The move to develop a decentralized economy also gathers strength from the point of view of rational distribution of industry to utilize natural and human resources effectively, helping to save and reduce outlay for the transport system needed to move raw materials and finished products as also to create employment opportunities widely. The lack of a regional balance observed in mainland China is to be remedied in course of time. The "Report on the First Five-Year Plan for the Development of the National Economy" presented by Li Fu-Chun, Vice-Premier of the State Council and Chairman of the State Planning Commission at the second session of the First National People's Congress in 1955, states that efforts must be made to "gradually rectify the irrational situation left behind from old China. The industrial productive forces must be appropriately distributed in all regions in the country, so that industry may be near producing centres of raw materials or fuel and marketing areas. The distribution of industrial enterprises must also satisfy conditions for the consolidation of national defence. The economic levels of backward regions must be gradually raised. This is one of the important tasks of the planned development of our national economy."[1/] To achieve this objective it is planned to strengthen the existing industries so that the equipment needed by new industrial areas can be manufactured relatively quickly. The Anshan Iron and Steel Works are to be expanded, as also the coal-mining industry in Fushun, the machine-building industry located in Mukden and many other manufacturing enterprises in the leading industrial cities. With the support of the already developed areas it is planned to step up industrial development in north, north-west and central China. An iron and steel industry is to be built at Paotow and Wuhan, to help setting up industrial bases in the inland provinces for the development of many new industries. Among the 694 "above-norm" industrial construction projects planned under the first Five-Year Plan, 472 projects are spread out in interior areas, this being the first step to secure better regional distribution of industry.

/At the end

1/ First Five-Year Plan (1953-57) for the Development of National Economy of the People's Republic of China, published by the People's Printing Press, Peking, 1955, pp.31-32.

At the end of the first plan period it is estimated that in the interior provinces the value of output in the machine-building industry will rise from about one-fifth to over two-thirds of national production and new textile and chemical industry centres would have also been established.

27. The importance of developing backward regions has been recognized in the first Five-Year Plan in India as shown by location of some of the important developmental projects in relatively undeveloped areas. Equitable regional distribution has been used as a criterion in the construction of electricity plants. This approach to the problem has, however, met with severe criticism as it has been made out that in practice there is a loss in national income as the region which can use additional power is starved while excess capacity characterizes some other areas. The effects of such anomalous distribution of power have been worked out in detail with reference to the impact on industry in Bombay.[1/] It should be assured that there is absorption capacity to use power before building new electricity plants. From the point of view of national income it will be useful to locate new plants where there is response. The assumption that supply creates its own demand will not be true unless the region is also favourably endowed with other factors such as raw materials, transport facilities, labour and entrepreneurship to organize production. While it is important to develop backward regions and transfer resources from the developed to the less developed areas it is necessary to ensure that exclusive concentration on under-developed areas should be avoided as the neglect of the developed areas would limit the surplus that can be invested elsewhere in the country.

28. In contrast with the strong agglomeration forces in industry observed in the large cities in the ECAFE countries industry, in the last few decades, is increasingly becoming independent of factors and location considered important till recently. The newer trends, however, are not sufficiently powerful to transfer existing installations but as regards the establishment of newer units other factors are entering the picture.

/29. This

1/ "Economics of Electricity Planning with special reference to the electricity cut in Bombay", by C.N. Vakil and P.R. Brahmananda, School of Economics and Sociology, University of Bombay.

29. This reflects the same pattern observed in some of the countries outside the region. For example, in the United States a definite trend of dispersal of industry is indicated to smaller cities and towns. Following new markets and new sources of labour industries have developed in new areas. New plants established in communities of less than 10,000 increased from 21 per cent in 1940 to 29 per cent in 1948. Cities of 10,000 to 100,000 have increased their percentage share from 32 per cent to 36 per cent while cities with a population of over 100,000 have recorded a decline from 47 to 34 per cent in the same period. In the large metropolitan areas the industries move away from congested areas but do not leave the general area.[1/] In England the Royal Commission on the Distribution of Industrial Population has favoured dispersal of industry, which has been laid down as official policy in the Distribution of Industry Act 1945. The growth of Agro-towns in the USSR is an effort to foster decentralized industrial growth.

30. Among the factors helping development on these lines the most important one is the expansion and extension of the electric power grids providing supplies of electricity outside the large cities and industrial areas. The plans for new generating capacity in the ECAFE countries expect to produce roughly additional 10 million kW to the already existing 21 million kW.[2/] Electric supply to small towns and villages is on the increase. The second Five-Year Plan in India, for example, envisages increased supply of electricity for small towns with a population in the range of 5,000 to 20,000, which link the surrounding rural areas; of the 4,000 such small towns, more than 80 to 90 per cent will be electrified at the end of second Five-Year Plan period as compared to 40 per cent at present. Electrification of more than half a million villages in the country is not considered feasible. However, with the establishment of various grid systems power will be available to the villages lying in the areas covered by the new installations. Consumption of electricity in rural areas will increase with favourable tariff rates, which at present are higher than in urban centres. The development of power resources is rapidly growing in other countries of the region, though in

/select areas.

1/ Robert H. Russell, "Industrial development of rural areas", in Proceedings of the Annual National Planning Conference held in Cleveland, Ohio, by the American Society of Planning Officials, 1949.

2/ See Economic Survey of Asia and the Far East, 1955, p. 23.

select areas. The development of highways, especially extension of present road networks, improvement in rail transport and inland waterways increasing speed of communications, and development of rural banking services as in India with the nationalization of the Imperial Bank of India, which held roughly 25 per cent of the deposits in the commercial banking system, to provide credit in about 400 towns serving rural areas, encourage decentralization of industry.

31. Decentralization will help to provide widespread employment opportunities by developing industries where manpower is abundant and thereby raise incomes in rural areas. There will be more even distribution of industry and proximity of industry to bases of raw materials and marketing areas will help to eliminate superfluous transport. Decentralization of industry, however, has to be concentrated on those industries where there is room for choice. It is obvious that extractive industry is governed by geological conditions and heavy industries must be located close to raw materials to achieve large-scale economies. The location of heavy industry may in turn promote the growth of a variety of ancillary industries in the neighbourhood. With increased distribution of power and better transport facilities, however, a large number of light industries, particularly consumer goods industries, can be influenced to spread out. Production on a decentralized basis should generally contribute to savings in costs and it must be ensured that, as far as possible, the economy effected in overheads should not be outweighed by increase in prime costs per unit of the same output.

32. Building up a decentralized industrial society does not necessarily mean acceptance of an inferior technology. It may, however, be necessary to modify or regulate the pace of application of modern techniques in those spheres where their uncontrolled adoption may cause more harm than good. Efforts must be made to improve techniques and equipment without, however, disrupting the existing widespread system of traditional industries by which the bulk of people dependent on industry live.

33. In course of time it is possible to visualize production spread out on an area basis with the implementation of some of the current economic development policies in the region. The processing of agricultural products

/and raw materials

and raw materials and all that may be self-supplied among the farmers' daily necessities is likely to be increasingly undertaken in the rural areas. Industry is likely to be progressively organized on a decentralized basis subject to the obvious exceptions mentioned earlier which are governed by physical factors. "In the process of change towards a better technique and larger and more diversified demand a stage would no doubt be reached when even for the pursuit of village-based industry some specialization in production and centralized common services would become necessary. This process of building upwards from the village base would naturally centre round small towns. Many of our older townships are located by reference to important geographical and economic features. These in most cases would continue to be important in any further improvement of economic organization. To be able to build round existing small centres of urban life would reduce not only the direct economic cost of industrialization but the indirect social and administrative costs. Experience in other countries shows that the effort of building up new industrial townships is wasteful, unless a special physical advantage exists in the new location or a specific social objective makes the effort necessary."[1/]

1/ Report of the Village and Small-Scale Industries (Second Five-Year Plan) Committee, Government of India, p. 21.